Bay Delta Conservation Plan (BDCP)
Conservation Strategy (CS) Workgroup Meeting

April 2, 2007, 12:00 p.m. to 3:00 p.m.
Resources Agency Bldg., Room 1131

Draft Meeting Notes

Co-chairs: Walt Wadlow and Anthony Saracino

Associated documents/handouts:
- Agenda
- Handout #1: Draft Conservation Objectives
- Handout #2: Future Meeting Topics
- Handout #3: Summary Scope of Work for Development of BDCP Conservation Strategy
- Handout #4: Schedule for Development of BDCP Conservation Strategy (Table showing March 2007 through 2008)
- Handout #5: Conservation Themes and Stressors (Working Draft Table, Sacramento Splittail: Conservation Themes with Stressors, Impact Mechanisms, and Conservation Actions)
- CS Workgroup Meeting Summary 3/5/07
- CS Workgroup Meeting Summary 3/19/07

Action Items and Key Recommendations

- SAIC will clarify definitions further in Handout #1, Item 4 for: species resistance to change, resilience, extreme events, unforeseen environmental change; Co-Chairs will agendize this discussion for a future meeting
- The schedule for CS decision-making is not comfortable for all members; Workgroup Co-Chairs and SAIC will discuss the schedule with K. Scarborough to determine how best to move forward, with particular attention to incorporation of independent science into the process

Meeting Notes Review and Adoption
Meeting notes from 3/5 were updated by SAIC based on comments from the 3/26 CS Workgroup meeting; changes were approved. Notes from 3/19 were adopted pending change of “would” to “could” on page 3, paragraph 1, and addition of page numbers.

Science Presentation: Fluctuating salinity and habitat in the Delta (Chuck Hanson)

The file of the full .ppt presentation will be made available to Workgroup members. A summary of the presentation and key points of discussion and debate follows.

C. Hanson presented an overview of fluctuating salinity and hydrology in the Delta. He summarized current scientific knowledge, levels of certainty about models and predictions, and the range of scientific opinion on the topic. He asked for input and feedback from the group, particularly from the biologists in the audience.

The conceptual hypothesis currently being studied and debated in the scientific community is that variable hydrology and salinities would generally favor native over non-native species because those were the conditions under which they evolved. This topic is important for BDCP membership to understand because the possible Conservation Strategies include some freshwater, static Delta alternatives and others that prescribe a fluctuating system. The change from a freshwater Delta to a fluctuating system would be significant because the management goals would include, for the first time, ecosystem elements as well as water exports.

C. Hanson described the life history, salinity tolerance, and other habitat needs for several Delta species, including *Corbula* sp., *Corbicula* sp., and *Egeria* sp., with emphasis on how fluctuating salinity would be likely to affect each of these species.

C. Hanson emphasized that fluctuating salinity in itself would not necessarily be sufficient to increase fish populations, but that proper habitat conditions and physical restoration activities overlaid with fluctuating conditions could help native species compete and persist over time. There are many data gaps in the model and these hypotheses are untested experimentally, however. Biologists at the meeting discussed how and how quickly the data necessary to confidently predict ecosystem-level responses to fluctuating conditions could be collected and analyzed. Possible research methods for gaining a better understanding the effects of fluctuating conditions in the Delta include meta-analysis, data mining, mesocosm experiments, and small scale restoration experiments. Biologists at the meeting emphasized that fluctuating conditions would have to be managed in an adaptive framework, since understanding the system-wide impacts would come slowly.

There was general consensus that a fluctuating Delta Conservation Strategy would be more flexible for long-term management than maintenance of a static Delta, and that flexibility will be important in coming years to prepare for and respond to climate change and potential natural disasters in the region. Most agreed that a fluctuating Delta seemed more likely to enhance the resistance and resilience of native species to both long-term change and stochastic perturbations. There was also recognition that the science needed to reliably predict the outcomes of re-introducing dynamic salinity into the Delta is incomplete, and that management decisions will have to be made with uncertainty. Considerations other than science will also have to be included (i.e. feasibility).

Presentation of Draft Conservation Objectives: Handout #1 (SAIC- Paul Cylinder)

Last week SAIC was asked to convert Conservation Themes that had been developed with the Workgroup to Objectives; this handout is the first draft that the Workgroup has reviewed. Objectives will provide guidance and lead to criteria for short-listing the CSA's.

There was extensive discussion about the legal and scientific definitions and context of "extreme" events and "unforeseen" environmental changes stemming from Objective #4, which currently reads "Increase species resilience to maintain species survival under extreme environmental conditions and catastrophic events." Biologists discussed how to understand and manage for environmental stochasticity, extinction events, resilience and resistance. Resilience was generally agreed to be among the most important population characteristics for which to manage. Restoration efforts would be designed and spatially arrayed differently in the Delta if managing for resilience. This issue of resistance and resilience is crucial for salmonids because hatcheries have dramatically reduced their genetic diversity and driven down survivorship. No consensus was reached on how best to word this Objective and SAIC was asked to rework the language for the next meeting.

Presentation of Future meeting topics: Handout #2 (SAIC- Paul Cylinder)

- 4/6 Steering Committee. CSA's for the Steering Committee will not be ready because SAIC received more comments. (NOTE: 4/6 was cancelled)
- 4/9 Conservation Strategy
    - Expanded descriptions of CSA's and discussion of long list
    - Discussion of short-listing criteria
    - Present last of the species themes and stressors tables (sturgeon).
- 4/16 Conservation Strategy
    - Settle on recommended criteria for short-listing to recommend to SC on 4/20
    - More discussion about long list.
- 4/23 Conservation Strategy
    - Settle on structure for how we apply the short-listing criteria to the CSA's
    - Start to apply the criteria to the CSAs
- 4/30 Conservation Strategy
    - In-progress on the evaluation via short-listing criteria.

A discussion ensued about the speed and order in which decisions are being made, particularly with respect to the integration of science in the CS Workgroup's work. A suggestion was made to rename the CSA's to "Conservation Plan Strategies" to reflect that they are alternative ways of addressing conservation goals. SAIC noted that the short-listing criteria are not just science-based, they also included feasibility.

Co-Chair Wadlow noted that this discussion is critical to moving forward.

Independent science panel proposal (late addition to agenda)

The fisheries agencies asked to present a proposal for integrating science into the Conservation Strategy process in the near-term, while the Independent Science Board (ISB) is still being set up but BDCP is still moving forward with decisions.

The lead scientist from CalFed's ISB, Michael Healy, agreed to assist with establishing the BDCP process and let members of BDCP access members of CALFED ISB to answer some of our most pressing science questions.

Significant debate ensued over the need and process for independent science integration in BDCP. The fisheries agencies stated that we need to set that up before we move forward with more of our decisions, and that otherwise we may end up having to rewind our process later on.

P. Cylinder noted that the schedule is of critical importance in this process; we will do everything that needs to be done to ensure a positive outcome for BDCP, but that we need to revise the schedule if there is discomfort with the process. He and Workgroup management agreed to discuss this with K. Scarborough as soon as possible.

Public comments

No comments at this meeting.

Next meeting

Next Monday, 4/9, same time and location.